METHOD, APPARATUS, COMPUTER PROGRAM PRODUCT AND SYSTEM FOR REPUTATION GENERATION

FIELD OF THE INVENTION

[0001] Embodiments of the disclosure generally relate to information technologies, and, more particularly, to computer-based data mining and fusing.

BACKGROUND

[0002] The fast growth of the network has dramatically changed the way that people express their opinions. Nowadays, people can freely post their views, feedback, comments and attitudes on any entities (e.g., products, hotels, services etc.) through numerous networked applications, such as websites or platforms etc., to express their personal opinions. They can also freely share their attitudes and comments in online and mobile social networking. As opinions express subjective attitudes, evaluations, and speculations of people in natural languages; this kind of contents contributed by the networked users has been well recognized as valuable information. It can be exploited to analyze public opinions on a specific object (e.g., topic or product) in order to figure out user preference.

[0003] Extracting reputation information of an entity is important for making a wise decision. However, no existing solutions can generate reputation through mining and fusing opinions expressed in natural languages, as well as opinion voting, opinion citation and user feedback rating in a comprehensive way. Further, it lacks a comprehensive visualization of reputation to effectively assist users in decision making. Therefore, it is desirable to provide an improved technical solution for reputation generation.

SUMMARY

[0004] This summary is provided to introduce a selection of concepts in a simplified form that are further described below in the detailed description. This summary is not intended to identify key features or essential features of the claimed subject matter, nor is it intended to be used to limit the scope of the claimed subject matter.

[0005] According to one aspect of the disclosure, it is provided a method for generating reputation of an entity from a plurality of opinions associated with that entity, wherein the entity and the plurality of opinions are expressed in a natural language. The method comprises: filtering said plurality of opinions based on pertinence of each opinion with respect to the entity; fusing the filtered opinions into at least one principle opinion set; and generating a reputation value based on said at least one principle opinion set.

[0006] According to another aspect of the present disclosure, it is provided a computer program product embodied on a distribution medium readable by a computer and comprising program instructions which, when loaded into a computer, execute the above-described method.

[0007] According to still another aspect of the present disclosure, it is provided a non-transitory computer readable medium having encoded thereon statements and instructions to cause a processor to execute the above-described method.

[0008] According to still another aspect of the present disclosure, it is provided an apparatus for generating reputation of an entity from a plurality of opinions associated with that entity, wherein the entity and the plurality of opinions are expressed in a natural language. The apparatus comprises: a filter configured to filter said plurality of opinions based on pertinence of each opinion with respect to the entity; a fuser configured to fuse the filtered opinions into at least one principle opinion set; and a reputation generator configured to generate a reputation value based on said at least one principle opinion set.

[0009] According to still another aspect of the present disclosure, it is provided a system comprising the above described apparatus and opinion data configured to store information about a plurality of opinions associated with an entity.

[0010] These and other objects, features and advantages of the disclosure will become apparent from the following detailed description of illustrative embodiments thereof, which is to be read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] FIG. **1** is a simplified block diagram illustrating a system according to an embodiment;

[0012] FIG. **2** is a simplified block diagram illustrating a system according to another embodiment;

[0013] FIG. **3** is a simplified block diagram illustrating a system according to still another embodiment;

[0014] FIG. **4** is a simplified block diagram illustrating a system according to still another embodiment;

[0015] FIG. **5** is a simplified block diagram illustrating a system according to still another embodiment;

[0016] FIG. **6** is a flow chart depicting a process of reputation generation according to an embodiment;

[0017] FIG. **7** is a flow chart depicting a process of reputation generation and visualization according to an embodiment;

[0018] FIG. **8** is a flow chart depicting a process of recommendation according to an embodiment;

[0019] FIG. **9** shows an example of reputation visualization according to an embodiment.

DETAILED DESCRIPTION

[0020] For the purpose of explanation, details are set forth in the following description in order to provide a thorough understanding of the embodiments disclosed. It is apparent, however, to those skilled in the art that the embodiments may be implemented without these specific details or with an equivalent arrangement.

[0021] As described herein, an aspect of the disclosure includes providing a technical solution for generating reputation of an entity from a plurality of opinions associated with that entity. FIG. **1** shows a system **100** in which some embodiments of this disclosure can be implemented.

[0022] As shown in FIG. **1**, the system **100** comprises a plurality of user devices **1011-101***n* each operably connected to an application server **102**. The user devices **1011-101***n* can be any kind of user equipment or computing devices including, but not limited to, smart phones, tablets, laptops, servers, thin clients, set-top boxes and PCs, running with any kind of operating system including, but not limited to, Windows, Linux, UNIX, Android, iOS and their variants. For example, the user devices **1011-101***n* can be Windows phones, having an app installed in it, with which the users can access the service provided by the application server